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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/823,780

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EXAMINER

KOCA, HUSEYIN

ART UNIT

PAPER NUMBER

3744

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/823,780	Applicant(s) KOJIMA ET AL.	
	Examiner HUSEYIN KOCA	Art Unit 3744	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-24 is/are pending in the application.
- 4a) Of the above claim(s) 15-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 15-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 01/14/2008.
2. The traversal is on the ground(s) that no undue burden is placed on the Examiner. This is not found persuasive because claims 15-24 are directed to patentably distinct subject matter from the originally presented claims that would require new and different search. Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 15-24 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 818.02(a), § 821.03.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
4. Claims 11-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 11 recite "leased communication line is a wire

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communication line and control information is exchanged mutually between said indoor unit, said outdoor unit, and said system controller” which renders the claim indefinite because the leased communication line connects outdoor unit and the system controller but is not connected to the indoor unit according to the claim 11. Claim 11 can be made clear by bringing “wherein leased communication line is a wire communication line” to the section where a leased communication line is introduced (lines 6-7).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bunkou et al. (JP-A-2002-243248) in view of Roh (6,430,953) and Masui et al. (2003/0140637), and further in view of Polkinghorne (4,843,833).

In regard to claim 11, Bunkou et al. teach an air conditioning system having indoor units (8), an outdoor unit (7), and a system controller (10) for controlling the indoor or the outdoor unit by executing communications as transmitting a signal via power line supplying electric power (0018, line 1; 0024, line 2-8); leased communication line for connecting outdoor unit with the system controller (0015, line 8-12; 0025, lines 1-2); power line communication is provided from the indoor unit via power line (0019, line 5-8); a bridge (6) is used for connecting the communication lines (0020, line 3-8); control information is exchanged mutually between the indoor unit, outdoor unit, and the system controller (0024, line 2-9); and a network configuration (0015, line 12). Bunkou et al. do not explicitly teach using high-speed communication. However, one having ordinary skill in the art will know that the network configurations usually comprise high-speed communication. Example of this can be seen by Roh, where Roh teaches using leased communication line (50) for connecting outdoor unit with the system controller (C-3; L-7-10) and provides high-speed communication (40) via a server (C-3; L-2-6). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a high speed communication as taught by Roh, in Bunkout et al. system in order to transfer data faster. Bunkou et al., and Roh do not explicitly teach that the leased communication line is a wire communication line. However, the general concept of providing a wire leased communication falls within the realm of common knowledge as obvious mechanical expedient and is illustrated by Masui et al. which disclose a wire leased communication lines (4, 104) (Fig. 53; Fig. 57; Fig. 59; 0004, lines 17-25; 0133, lines 7-10); and one of ordinary skill in the art would

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have been motivated to include the use of wired leased communication line in order to avoid signal distortion during wireless communication to have better communication between the outdoor unit and the system controller. Bunkou et al., Roh, and Masui et al. do not explicitly teach a blocking filter. Polkinghorne teaches using a blocking filter (22) disposed in the power line (C-8, L-36-38). It is well known in the art that the blocking filters are commonly used to protect electronic load from surges, transients, and they often provide noise filtering. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the system of Bunkou et al., Roh, and Masui et al. so that it includes a blocking filter as taught by Polkinghorne in order to advantageously protect the electrical equipments in the system.

In regard to claim 12, Bonkou et al. supply electric power to the indoor unit through a single-phase power line and to the outdoor unit through three-phase power line. Fig. 1 of Bunkou et al. shows that the single-phase power line is marked as (//) and the three-phase power line is marked as (///). The single-phase power line is connected with three-phase power line through leased communication path (0015, line 12-15).

In regard to claim 13, Bunkou et al. teach that the bridge (6) provides protocol converting means (0015, line 8-12).

In regard to claim 14, Bunkou et al. teach that the bridge (6) is served to pass only the data oriented for the indoor unit being connected with power line from the leased communication line to the power line side (0035, line 4-8).

Response to Arguments

8. Applicant's arguments with respect to claims 11-14 have been considered but are moot in view of the new ground(s) of rejection.

1. Applicant argues that Bunkou does not teach the use of a leased wire communication line between the central controller and the outdoor/indoor units.

In response, Examiner strongly disagrees. Bunkou et al. clearly teach a leased communication line in Drawing 1 and Drawing 4. Bunkou et al teach a leased wire communication line in Drawing 1, and a leased wireless communication line in Drawing 4. However, this might not have been clear to the applicant from the machine translation provided. Therefore, Examiner uses Masui et al. to clearly teach a leased wire communication. Additionally, in the "Background of the Invention" section of the Specification, applicant discloses JP-A-2002-243248 (Bunkou et al.) as a prior art who teaches a wireless or a wired leased communication path (Specification, page 3, lines 8-16). Additionally, claim 11 clearly states that a leased communication line is for connecting the outdoor unit with the system controller (claim 11, lines 6-7), and this limitation is taught by Bunkou et al.. Claim 11 do not require leased wire communication between the controller and the indoor unit. It is noted that the features upon which applicant relies (i.e., leased wire communication between the controller and the indoor unit) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the

claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, applicant's argument is not persuasive.

2. Applicant argues that Bunkou et al. do not disclose or suggest leased wire communication between the controller (10) and the converters (6), much less between the controller (10) and the outdoor/indoor units (7,8).

In response, Examiner would like to bring applicant's attention to the reference numbers provided in the arguments. According to the specification 10 designates a connecting wire between communication areas, reference number 6 does not exist but there are reference numbers 6a, 6b, 6c which designate branch power lines, 7 designates a central controller, and 8 designates a gateway. Applicant's reference numbers provided in the arguments do not correspond to the designated parts. Therefore, applicant's argument is not very clear. Examiner assumes that the argument is Bunkou et al. do not disclose or suggest leased wire communication between the controller and the outdoor/indoor units.

Examiner strongly disagrees. Claim 11 clearly states that a leased communication line is for connecting the outdoor unit with the system controller (claim 11, lines 6-7), and this limitation is taught by Bunkou et al.. Claim 11 do not require leased wire communication between the controller and the indoor unit or the converter. It is noted that the features upon which applicant relies (i.e., leased wire communication between the controller and the indoor unit or the converter) are not recited in the rejected claim(s). Although the claims are

interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Therefore, applicant's argument is not persuasive.

Remarks

9. Examiner has cited particular paragraphs, figures, columns and line numbers in the references as applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant, in preparing the responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the examiner.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HUSEYIN KOCA whose telephone number is (571)272-3048. The examiner can normally be reached on Monday - Friday 9:00AM to 4:00PM.

11. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler or Frantz Jules can be reached on (571) 272-4834 or (571) 272-6681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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12. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HK/

/Frantz F. Jules/
Supervisory Patent Examiner, Art Unit 3744